

Common Livestock Formulas

Trait Ratio

$$\frac{\text{Individual Animal}}{\text{Average of all Animals}} \times 100$$

205 day Weaning Weight

$$205 \text{ d Wt} = \frac{\text{actual Wt-birth W}}{\text{age in days}} \times 205 + \text{BW}$$

adjustments for age of Dam:

Dam Age	Males (lbs)	Females (lbs)
2 yr olds	+60	+54
3 yr olds	+40	+36
4 yr olds	+20	+18
5-10 yr olds	No adjustments	
11 + yr olds	+20	+18

Calculation of TDN

TDN =

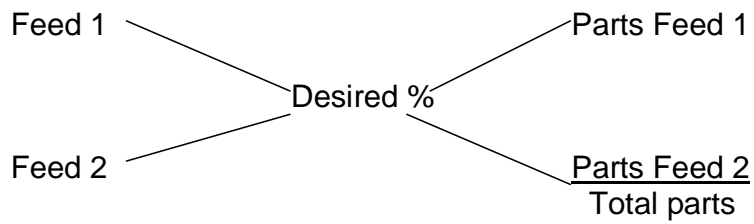
- Dig. Protein (0.75)
- + Dig. N-free extract (0.90)
- + Dig. Fiber (0.50)
- + Dig. Ether Extract (2.25)

Bushel Weights and Conversions to CWT

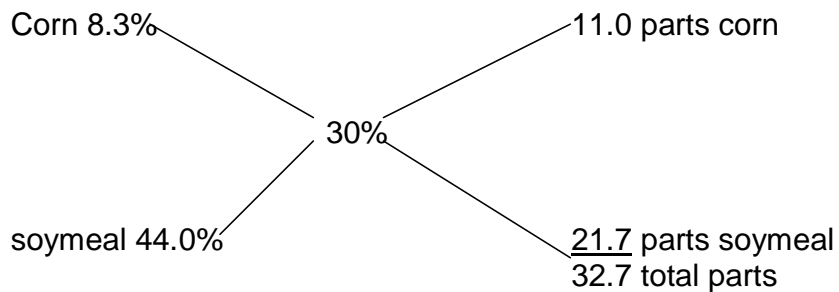
Feed	lbs/bu	bu/CWT
Barley	48	2.08
Buckwheat	48	2.08
Corn, shelled	56	1.79
Corn, ear	35	2.86
Oats	32	3.12
Rye	56	1.79
Soybeans	60	1.67
Wheat	60	1.67

Simple Two Feed Ration Balance

Nutrient %



Example: want 30% protein. Use corn (8.3% protein) and soymeal (44% protein).



to find % corn and soymeal actually fed:

$$11.0 / 32.7 = 33.6 \text{ parts corn}$$

$$21.7 / 32.7 = 66.4 \text{ parts soymeal}$$